

Statement To US Copyright Office
Regarding Distance Education And Fair Use

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Submitted by:

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Statement To US Copyright Office On Behalf of InterTrust Technologies Corporation, Sunnyvale, CA

We are delighted to participate in the Copyright Office's study of distance education and fair use issues. The study provides an important opportunity to provide the Copyright Office, the Congress, and the stakeholder communities with specific information regarding current technologies that can address many of the fair use and other concerns raised by Congress and by participants in this study. We hope that this information will help the Copyright Office in making recommendations to Congress.

One of the fundamental points we wish to make is that commercial rights management and administration technologies are now being deployed in several markets. These technologies address many of the concerns that are the focus of this study. Specifically, these technologies can protect and manage digital copyright information in the context of the broad needs of many segments of the education community, including distance education programs. Information is also protected and managed in a manner capable of balancing the interests of copyright holders and users.

Some early, first generation information security and copy protection technologies have been created to address specific markets and limited threats to digital information. For example, certain conditional access technologies were created to protect television broadcasts over cable or satellites or to prevent unauthorized access and copying. Concurrent use technology has been deployed to manage access to digital assets such as content or software products that reside on computer networks in corporations, at elementary and secondary schools, and on college campuses. Other encryption technologies provide protected delivery and vending of software to authorized users. Several companies are addressing the protection of compressed digital music and other audio content for delivery over the Internet. Still other technologies have been created primarily to protect digital documents from unauthorized use, including unauthorized printing.

In addition to these specialized technologies that focus on particular vertical market segments and content types, there is technology available now, and other technologies

that may emerge, which provide more general purpose solutions for protecting and managing multiple content types on various media. The InterTrust products are an example of such general purpose technology. More specifically, InterTrust provides software tools that can be used to create applications and services that protect any kind of digital information, including text documents, video, audio, software programs and Web pages. Because we are most familiar with our own technology, we will use our products and their capabilities as examples illustrating our main point that many of the fair use and other rights issues now under consideration in this study can be addressed by technology. We believe that those involved in various segments of the education community, including distance education, are empowered by available technology to reach the balance of policy and commercial considerations appropriate for their circumstances.

But the technical landscape is also responsive, in part, to the changing educational landscape, the area of most concern in the discussion of fair use issues. The distance learning market, just like the Internet economy itself, is in a period of substantial and fundamental change. For example, the reading rooms and reserve stacks of college and university libraries have moved to the Internet and WWW, serving users – both students and faculty -- who may reside on campus or be at a great distance.

In this changing landscape, InterTrust® rights management technologies provide efficient and effective means by which publishers, teachers, students, educational institutions, distributors of course materials, and other participants can manage rights associated with digital information of all kinds, and use this information according to electronic agreements among the parties. Societal policies such as fair use and privacy interests can be accommodated as well.

Thus, because of rapidly emerging technologies, the "possible" is rapidly becoming the "practical." Over the next few years, technology will address many of the principal concerns now being raised by rightsholders and by users of copyrighted materials that are the focus of this study and the recommendations to the Congress. Admittedly, technology may not resolve each and every issue; nevertheless, rights management

technologies can, in our opinion, go very far in enabling the balancing and administering of the rights and interests of all stakeholders in the distance education arena (as well as other educational contexts) involving digital information resources. Thus, we encourage the Copyright Office and the Congress to consider the availability of technologies that currently exist and that will emerge in the near term. The availability of these technologies may not only influence appropriate legislative policies that balance the interests of suppliers and participants in distance education and other education arenas, but they may also help to administer such policies electronically and efficiently as well.

Although we address specifics later in this document, we note in response to questions posed by Congress that, yes, indeed, information security and rights management technologies now available can prevent unauthorized reception, use, or retention of copyrighted digital materials; current technologies also can ensure the integrity and authenticity of these materials. Current and coming technology can also go a long way toward addressing a broad range of licensing difficulties, while serving to facilitate the identification of rightsholders, the clearance of rights, and the process of obtaining licenses, including price differentiation based on such attributes as the user's purpose, need, institutional affiliation, and ability to pay.

Before we address specific rights issues, we wish to emphasize that InterTrust's business model and products are completely neutral with respect to rights asserted. We take no position regarding commercially appropriate relationships among stakeholders in distance education, in other aspects of elementary, secondary, postsecondary, or corporate education, or in any other institutional segment or market. InterTrust does not operate or directly participate in electronic commerce models or services, but rather focuses exclusively on providing rights management and information security software tools and an interoperable trusted electronic commerce software foundation.

InterTrust provides efficient, global solutions to many of the important rights issues in education and other digital markets:

- Electronic licenses and agreements: Efficient electronic license administration benefits everyone. InterTrust technology enables all

parties to create electronic value propositions and enter into electronic agreements governing the use of digital information. These easily created electronic agreements may, for example, apply to use across networks at home, on campus, or at the work place. These rules may apply to online or offline use of digital information, and, as noted, may pertain to use consequences, such as payment and usage reporting. The parties are empowered to decide among themselves the business models for provision of digital information. These models include whether or not payment will be required for the use of digital information, the circumstances in which payment or return of use information is required, and whether materials can be passed on—perhaps only to other registered students or to larger communities.

- License administration through commerce rules: License administration becomes more efficient and flexible through permissions that are digitally created, distributed, managed, and enforced. InterTrust provides software enabling rightsholders, including governments and standards bodies, to easily define, contribute and electronically administer business rules reflecting their rights and interests in digital information.
- Persistent protection: Although transmission and copying have been at the center of ongoing rights controversies, the ability to persistently protect information and ensure its use only in authorized ways resolves both of these issues. Sending information in protected formats means that no matter who intercepts the transmission, they would not be able to use that information without authorization. In addition, persistent protection fundamentally transforms copying and unauthorized access from a threat into a commercially significant opportunity. Protected information—an audio recording used in a lecture, for example—can only be used according to associated rules. As the protected information is passed along from person to person, the rules may enable all those receiving protected copies to use the information provided they satisfy certain rules established by the rights holder.

Moreover, *persistent protection* means content is secure after it has been accessed by an initial authorized user. Consequently, a second, unauthorized user could not access content that has been passed on by an authorized user unless and until the second (and subsequent) user became an authorized user. Alternatively, persistent protection remains an option, not a requirement. Rightsholders may specify that in accordance with rules, the content may be exported out of the protected environment. The decision to protect or not to protect information may be determined through negotiations among rightsholders and users.

- Protecting rights of all parties: To resolve many of the important rights issues in education (including distance education), technology must serve broad interests; it must not embody the interests of a particular group. Consequently, the broadest range of rightsholders must be able to contribute rules reflecting their interests, limited only by their creativity, and perhaps, by more senior participants in the particular model, such as governments. This broad range of rightsholders includes, for example, students, faculty, researchers, publishers, authors, aggregators, distributors, and payment processors. The InterTrust technology is fundamentally flexible and neutral: it does not inherently favor any particular party or interest. Again, those involved will decide the rules.
- Rights may be conditional: Rights often depend on context. As noted earlier, Congress has asked specifically whether technology could distinguish licensing contexts. In a vast majority of instances the answer is "yes." Using InterTrust technology, rights may depend upon class membership, including identity characteristics of information users, providers, and other stakeholders. Rights may also depend upon categories of digital information, such as journal articles, course material, supplemental information, electronic simulations, digital

images, and so on. Identity characteristics are transparently and effectively applied in real-time when a digital event is requested, for example, "I wish to view a certain chapter in a certain textbook." With privacy in mind, we note that it is possible to create access and authorization rules that offer discounts, or even offer "free" authorized access to individuals having certain characteristics (e.g., low-income users). In this example, the school might provide a digital credential indicating that the student was a member of class eligible for no-cost pricing or was covered by an institutional subscription.

- Territoriality: Many rights are commonly granted for use within specific nations or regions. InterTrust technology enables stakeholders to differentiate rights by territory. For example, when InterTrust technology is used to protect digital information used in the United Kingdom, transactions may be in pounds sterling rather than dollars. These transactions can flow through a clearinghouse that specializes in UK transactions and usage reports and money then flows to those with UK rather than US rights. In the educational context, a course (or course materials) may be authorized for use in the US this year and outside the US next year, as determined by rightsholders.
- Governments and societies: Sovereign nations and communities of nations have also have rights and interests regarding distribution and access to information. At their discretion, governments may use InterTrust technology to assert their rights and interests, for example, regarding taxes or the differing rights of children and adults.
- Media and Format Independence: Education, including distance education, already makes use of a very broad range of distribution media and formats. To be successful, an information security and rights management technology should be media independent. InterTrust technology can protect digital information on the Internet and World Wide Web, on optical media such as DVD and CD-ROM, and on any other digital distribution method. InterTrust technology can also protect

text, image, video, audio, multimedia, and software, including audio and video streaming formats increasingly used in various educational contexts, including (but in no way limited to) distance education.

- Privacy by agreement: InterTrust is aware that some information security and rights management technologies may raise privacy concerns. Our technology is neutral in this regard; it leaves decisions as to how or whether any information about users will be collected up to users and the parties employing the technology.

InterTrust began shipping commercial products to its partners in the summer of 1998. At the end of December 1998, we shipped our Commerce 1.1 release that today is used by a variety of content developers and rightsholders to create and manage the broadest range of applications and services, both on the Internet and in other digital contexts. Pilot projects are now under way; we expect numerous InterTrust-based commercial applications and services to be in the marketplace by the end of 1999. Business information, education, music and other entertainment segments, and healthcare information are some of the markets that are the early adopters of our products.

As education, including distance education, is increasingly a global activity, we note that information security and rights management must be global as well. Our announced partners include Rights Exchange, Inc. (NY, a corporation originally created by SOFTBANK, the computer information and services company), Mitsubishi Corporation of Japan, and National Westminster Bank, Plc. (UK). Other announced partners include Science Applications International Corporation (SAIC) and Computacenter Plc (UK). Each of our partners, in turn, is developing or has partners of their own using the InterTrust rights management technologies.

Of course, rights management technologies are not evolving in a vacuum. InterTrust participates in numerous industry, national, and international standards processes, including MPEG (the Moving Picture Experts Group), OPIMA (Open Platform Initiative For Multimedia Access), and the multi-industry Copy Protection Technology Working Group. Earlier this week InterTrust announced intentions to participate in the Recording

Industry Association of America's (RIAA) Secure Digital Music Initiative (SDMI) supporting standards for secure digital distribution of music. InterTrust software products make use of several technology standards and co-exist or interoperate with many others

We thank you for this opportunity to address some of the principal questions under discussion in these hearings and by the current study. We hope that this information, along with the accompanying supplemental materials, contributes to an enhanced understanding by the Copyright Office and the Congress of the rights management issues and the technologies that affect digital content providers and users in the education arena.